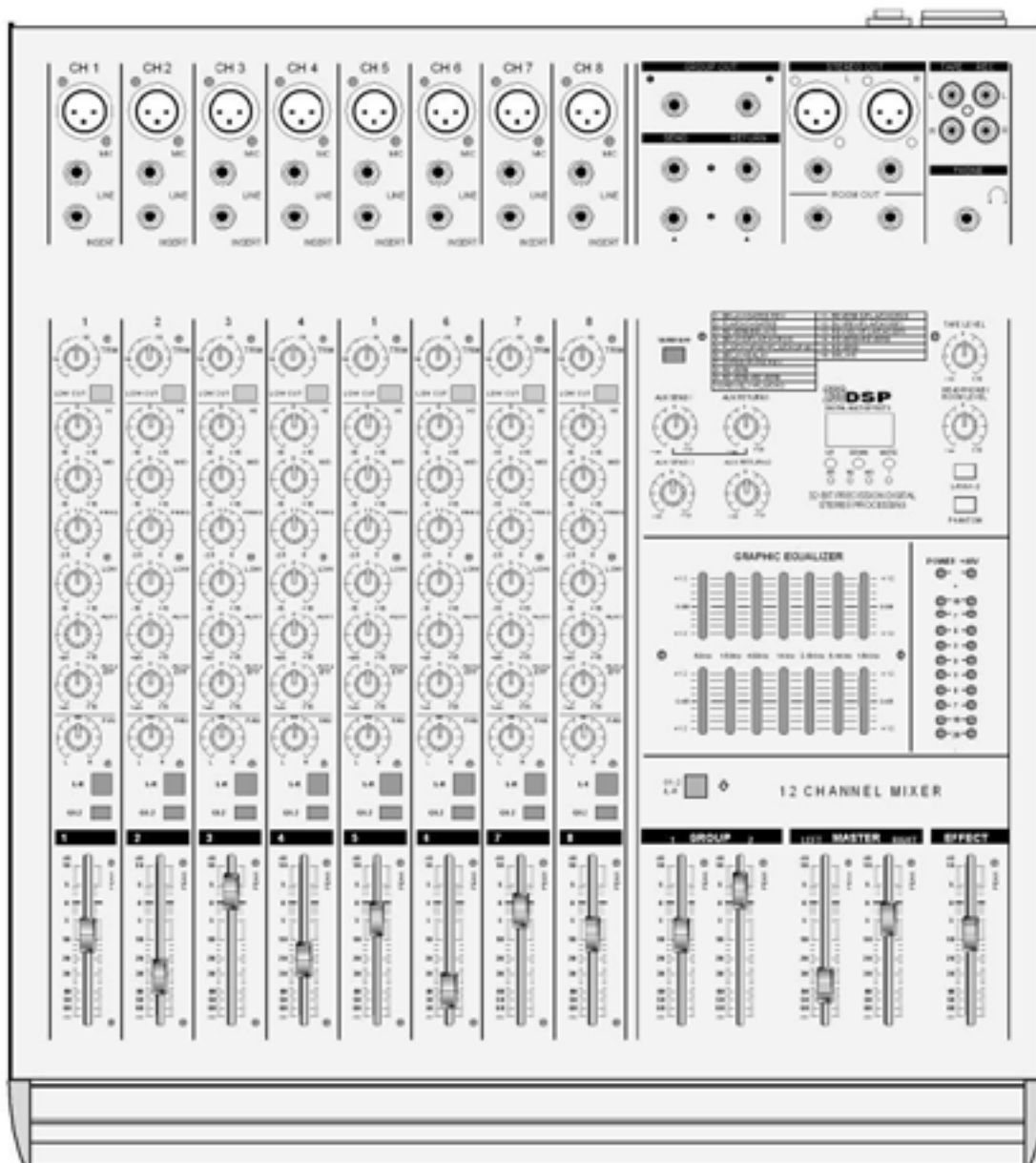




Owners Manual

PMXL8 PMXL16



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Ultra low noise 6,8,10,12,16-Channel Mic/Line Power Mixer

- ▲ 6,8,10,12,16 Mono Input Channels with gold plated XLRs and balanced Line Inputs
- ▲ Ultra-low noise discrete Mic Preamps with +48 V Phantom Power
- ▲ Extremely high headroom - offering more dynamic range
- ▲ Balanced Inputs for highest signal integrity
- ▲ Ultra-musical 3-band EQ+FREQ on all mono channels
- ▲ Peak LEDs all Mono Channels
- ▲ 2 Aux Send per channel for external effects and monitoring
- ▲ Built in digital multi effect (32 Bit) 256 DSP
- ▲ Separate Master Mix, Control Room and Headphone Outputs
- ▲ 2-Track Inputs assignable to Master Mix, Control Room/Headphone Output
- ▲ Highly accurate 10 segment Bargraph Meters

SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of electrical shock, do not remove the cover (or back). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electrical shock, do not expose this appliance to rain or moisture.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

A. INPUT CHANNEL SECTION

1. BALANCE INPUT (MIC)

Electronically Balanced inputs acceptable a standard XLR male connector.
+ 48V Phantom Power available on each input Mic socket.

2. LINE INPUT

The unbalanced Mic input is provided for the use of an unbalance mic and is designed to accept an unbalanced high impedance input signal.
(This is for connecting a Tape Deck, Turntable, Keyboard etc..)

3. INSERT

The INSERT is a break point in the input channel signal path. It allows the signal to be taken out from the mixer, through external equipment such as a compressor, and then back to the mixer to continue the final mix output.

4. TRIM

This has a function which adjusts the input sensitivity of each channel in order to input a constant level of signal.

5. LOW CUT

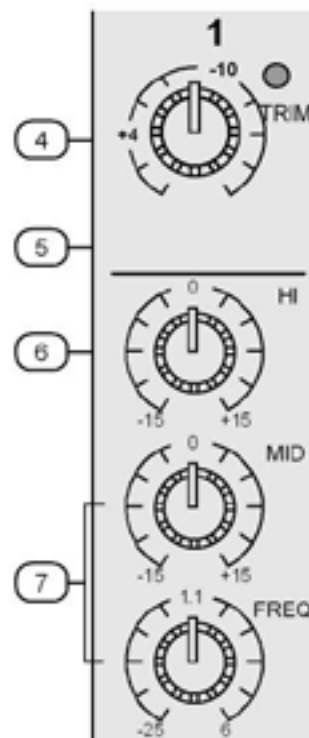
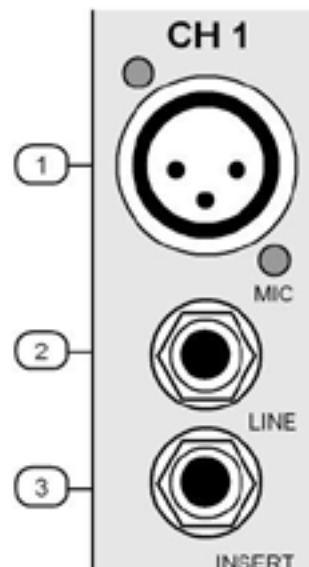
Insert the 18 dB per octave 75Hz low cut filter in the signal path. This low cut filter is useful on live vocals to reduce stage rumble or "popping" from microphones. It can also be used to cut off low frequency hum.

6. HIGH

Control the high frequency tone of each channel. Always set this control to the 12 o'clock position, but you can control the high frequency tone according to the speaker, the conditions of listening position and listener's taste. Clockwise rotation of the control increases level.

7. FREQUENCY +MID

This equalization has a "bell" response i.e. having reached maximum amplification or attenuation at the selected frequency, the amplitude response returns to zero either side of that frequency. The FREQ at which this occurs is variable between 250Hz. The GAIN is variable between *15dB at the selected frequency.



8. LOW

Control the low frequency tone of each channel. Always set this control to the 12 o'clock position, but you can control the low frequency tone according to the speaker, the conditions of listening position and listener's taste. Clockwise rotation of the control increases the level.

9. AUX1

This is normally derived after the EQ section and channel fader (PRE-FADE, POST EQ), and is therefore unaffected by fader position and routing status. This makes the send particularly suitable for foldback or monitor feeds, which need to be controlled separately from the main P.A. Mix. All pre-fade sends may be selected internally to be PRE-FADER, PRE-EQ.

10. AUX2/EFF

This is normally derived after the EQ and channel fader (POST FADE, POST EQ), and is therefore follow any changes in fader level. They are normally used to drive effects processing units which are fed back into the mixer and which must fade out with the input channel.

11. PAN

The pan control sends continuously variable amounts of the post fader signal to either the left or right and G1 or G2 main busses. In the center position equal amounts of signal are sent to left and right or G1 & G2 busses.

12. STEREO

When switch is down, send signal to Main bus, the volume of signal is adjusted by channel fader.

13. GROUP 1-2

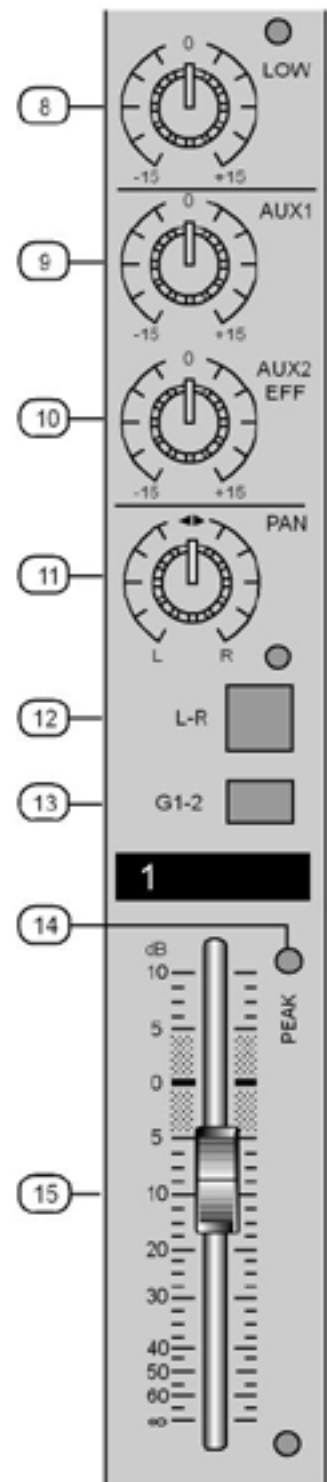
When switch is down send signal to group bus, the volume of signal is adjusted by channel fader.

14. PEAK

A red LED indicates a signal level at the insert return point, premaster fader. It illuminates at approximately 5dB below clipping.

15. CHANNEL FADER

This is function to adjust the volume of signal connection into each channel and adjust the volume of output, together with master fader. Normal operating position is at the "0" mark, providing 4dB of gain above that point, if required.



B.MASTER SECTION

16. SEND / EFFECT

When this button is up, Post signal work as send signal.

When this button is down, post signal work as EFFECT signal.

17. AUX SEND / RETURN

This is used for adjusting volume of AUX device when using the AUX send/return jack.

18.EFFECT PROGRAMS

When adjust switch 19,20,21 more effects are displayed.

19.UP TAPE SWITCH

One push, one program up push with more than 5 seconds hi-speed program up.

20.DOWN TAPE SWITCH

One push, one program down, push with more than 5 seconds hi-speed program down.

21.MUTE

Effect ON/OFF.

22.Pre-set

Push more than 5 seconds, It automatically memorize the displayed program number. Once just Push M1, M2, M3, always display memorized program.

23. EFFECT LEVEL

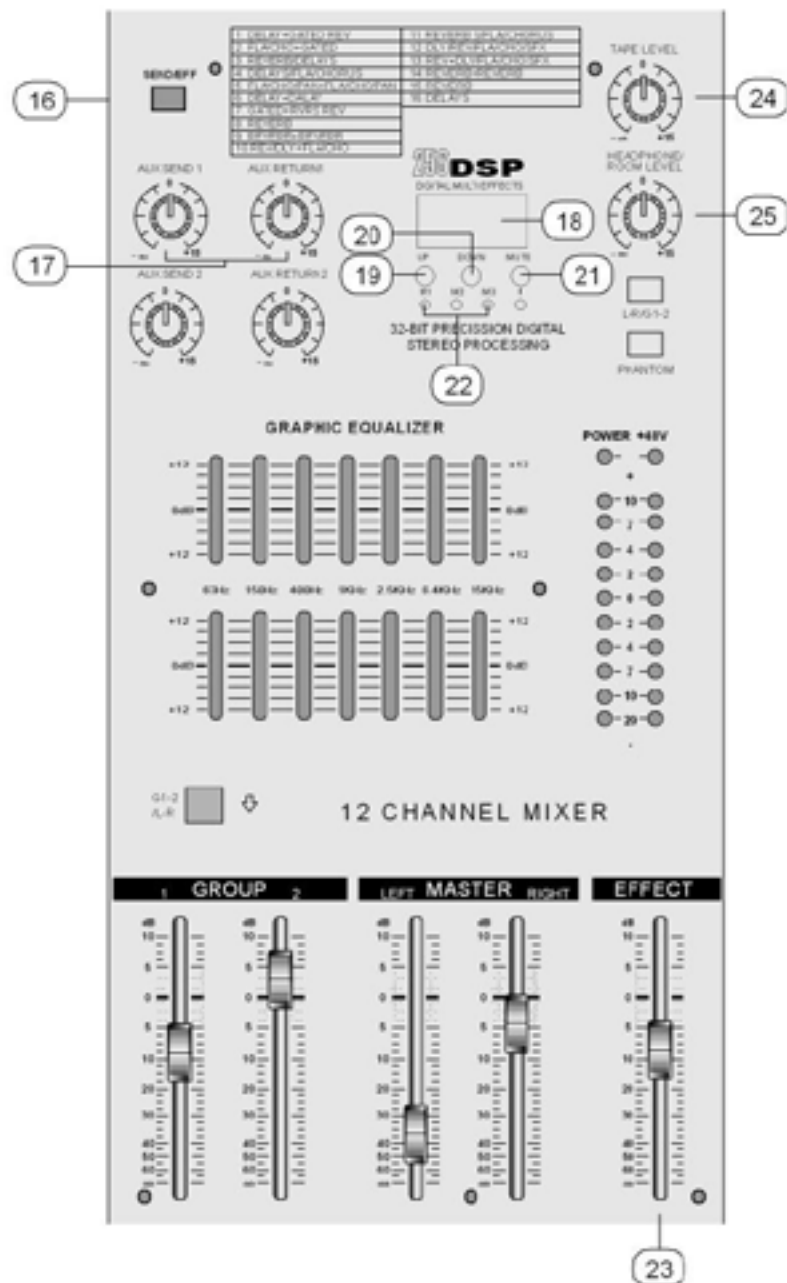
You can adjust signal level of DSP & external effect.

24. TAPE LEVEL

You can adjust the volume of TAPE in signal when connecting tape in.

25. HEADPHONE/CONTROL ROOM LEVEL

This is a single volume control for the level of the headphones and main monitors.



26. L-R/G1-2

When L - R / G1 - 2 switch up, could monitor stereo (L-R) output signal, when L-R/G1-2 switch down, could, monitor group (G1-2) output signal.

27. PHANTOM POWER SWITCH/LED

Depressing this switch applies 48 V DC across all microphone input channels connectors for remote powering of condenser microphones.

The LED will be turned on when start working.

28. STEREO GRAPHIC EQUALIZER

2X7-band equalizer is provided for tone control over each frequency, and for preciss high quality sound by final tone control.

29. POWER LED

Indicates that the device is on and ready for operation.

30. OUTPUTS LEVEL INDICATOR

This is level meter which shows output levels of left & right channel condition operation.

31. L-R/G1-2 SWITCH

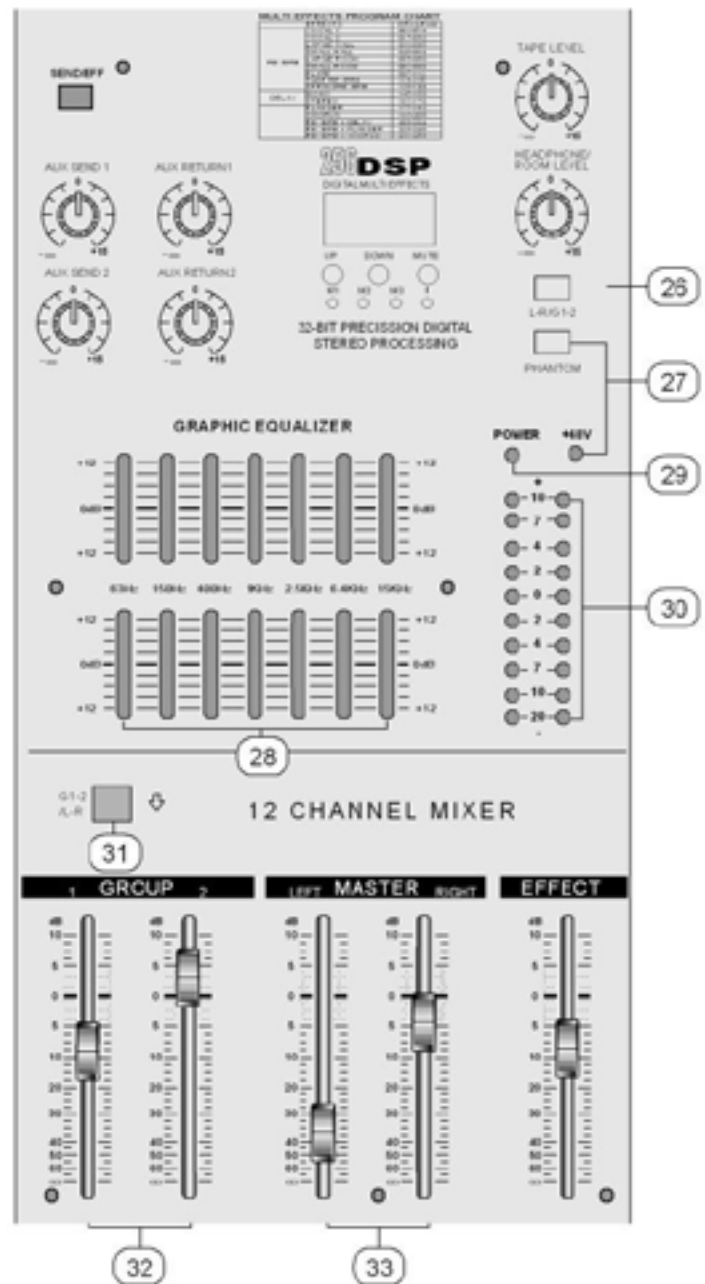
This switch routes the G1-2 mix output to the STEREO bus, allowing G1-2 bus to be used two mono subgroups mixed down to a single output when stereo is not required.

32. OUTPUT GROUPS 1-2 FADERS

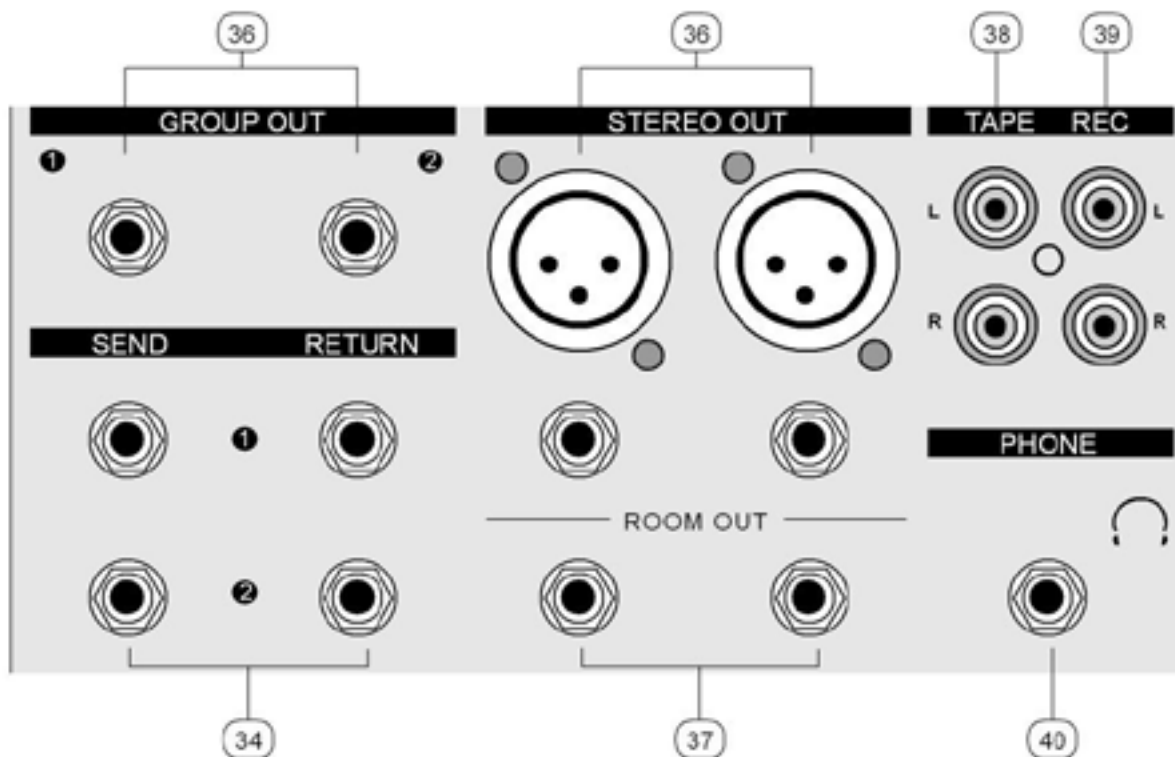
By using this control, you can adjust G1-2 output level.

33. OUTPUT MAIN FADER (LEFT/RIGHT)

This is a master fader to adjust the volume of left/right output. Unity gain is at the top of their travel.



C. MIXER OUTPUT SECTION



34. STEREO AUX RETURNS & SENDS

This can be used to connect all external effect.

35. GROUP 1-2 OUTPUT JACK

Line out, connect the external amplifier.

36. STEREO OUTPUT JACK (LEFT/RIGHT)

This is the Main output signal to be connected to amplifier through XLR & 1/4" jack.

37. ROOM OUT JACK

This is used for monitoring the Main output signal by connecting Main monitor to L/R 1/4" jack.

38. TAPE INPUT JACK

This jack is to be connected with tape deck when playing back.

39. RECORD OUT JACK

This jack is to be connected with tape deck when recording the mixed output.

40. PHONE JACK

You can monitor working conditions by connecting headphones to this 1/4" jack.

D. POWER SECTION

41. SPEAKER JACK

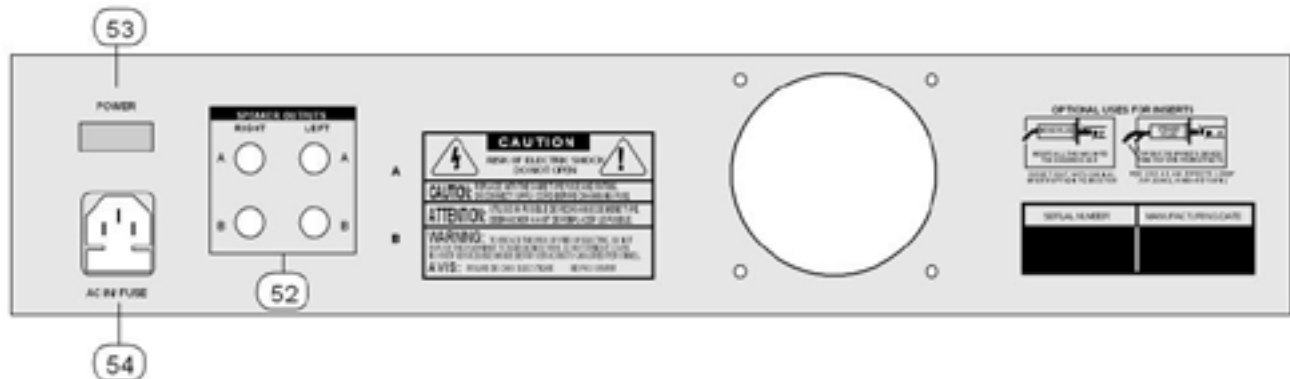
Speaker output jack.

42. POWER SWITCH

On/off switch. The LED (see no.34) is on indicating device is ready operation.

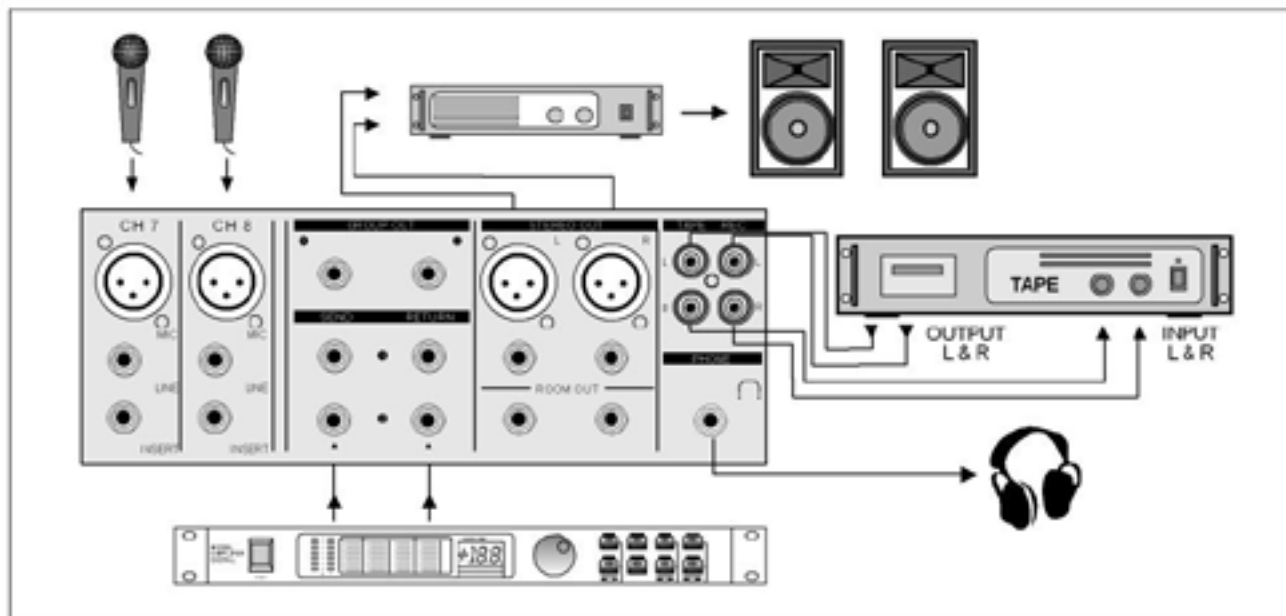
43. POWER JACK

Line R AC power cord.



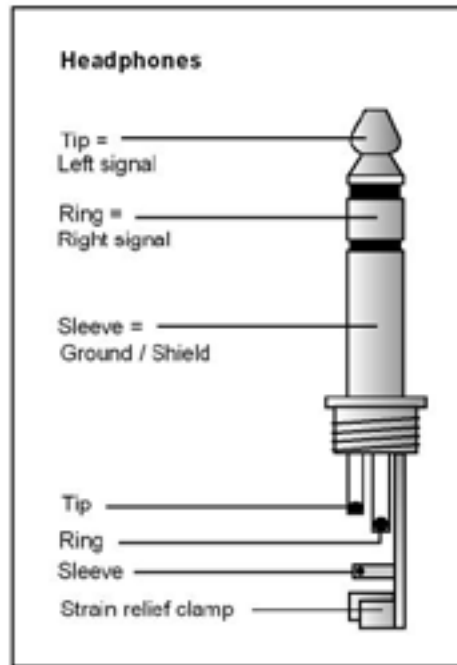
E. INSTALLATION

Experience tells us that the cables in a studio environment get tangled very quickly (inviting mistakes).

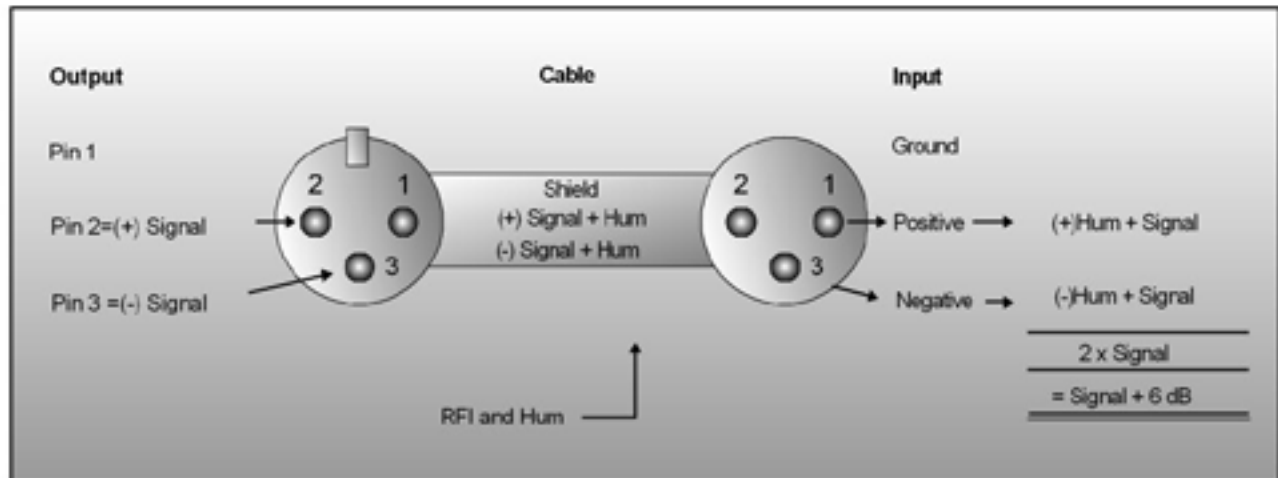


F. CONNECTIONS

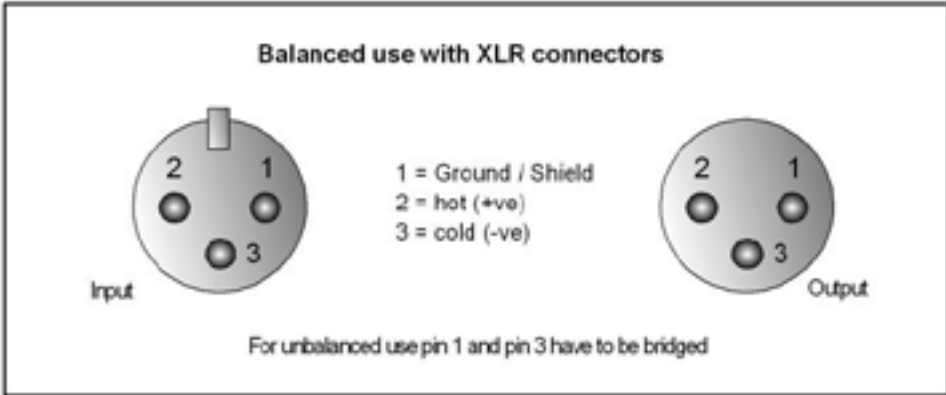
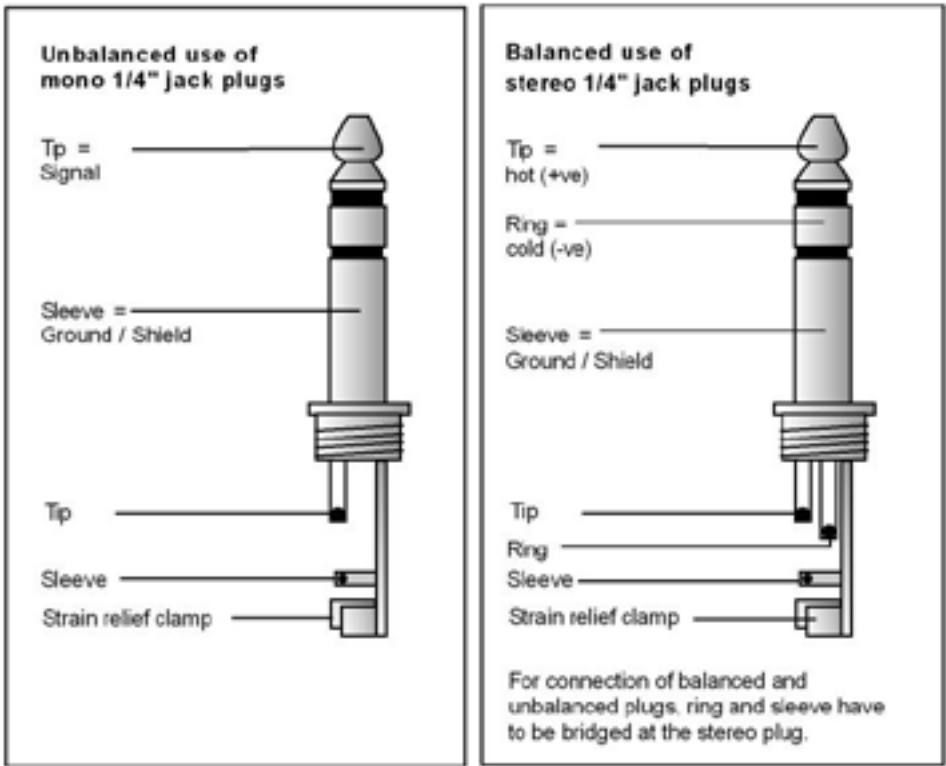
You will need a lot of cables for different purposes - see the following figures to make sure you have got the right ones. Unbalanced equipment may be connected to balanced inputs/outputs. Either use mono 1/4" jacks or connect ring and sleeve of TRS jacks.



Headphone connection



Compensation of interference with balanced connections



Different plug types

G.APPENDIX

Specifications

Mono Inputs

Mic Input	electronically balanced, discrete input configuration
Bandwidth	10 Hz to 60 kHz \pm 3dB
Distortion (THD & N)	0.01% at +4 dB μ , 1 kHz, Bandwidth 80 kHz
Mic E.I.N (22 Hz - 22 kHz)	-129.5 dB μ , 150 Ohm source -117.3 dB _q p, 150 Ohm source -132.0 dB μ , input shorted -122.0 dB _q p, input shorted
TRIM range	+10dB to +60dB

Line Input	electronically balanced,
Bandwidth	10 Hz to 60 kHz \pm 3 dB
Distortion(THD& N)	0.01% at +4 dB μ , 1 kHz, Bandwidth 80 kHz
Line level range	+10dB μ to -40dB μ

Equalization	
Hi Shelving	12kHz+/-15dB
Mid Range	2.5kHz+/-15dB
Lo Shelving	80Hz+/-15dB

Master Mix section

Max Output	+22 dBu balanced
Aux Send Max Out	-22 dBu unbalanced
Control Room Out	+22 dBu unbalanced
Signal-To-Noise Ratio	112 dB, all channels at Unity Gain

Power supply

Mains Voltages	110V AC 60Hz SWITCHABLE 220V AC 50Hz
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Power	PMXL8	PMXL16
	800W	1600W

N.W	LBS	LBS
	27.56LBS	39.68LBS

MEAS:	inch	inch
	22.83"X21.65"X9.57"	31.69"X21.65"X9.57"